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ABSTRACT

The New Haven Institute of Allied Health Careers has been involved in a project to (1) assist educationally disadvantaged students in preparing themselves for health careers opportunities through guidance services and (2) address the lack of access to and mobility within the health professions systems through educational change. Made up of a consortium of independent institutions, the institute worked as an extraschool agency supplementing school career education curricula through: institute staff experiences for grades 10-12. Program components are described and include: academic assistance, guidance services, career and educational exposure, and interinstitutional educational planning. Component methodology, evaluation and description of programs developed, analysis and demographic information regarding the 200 selected student affiliates, guidance personnel perceptions, effectiveness of career exposure, anticipated job opportunities in Allied Health and the employability of high school graduates, and program related forms and questionnaires are presented. The institute has attempted to nurture an adequate enough minority student constituency to encourage more responsive admission policies in area allied health professions programs, and 100 of its past graduates are attending college. (LH)

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New Haven Institute of Allied Health Careers

Final Report
Contract No1-AH-24060

Submitted
to

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August 31, 1975

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New Haven Institute of Allied Health Careers
Final Report

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INTRODUCTION

Contained herein is the Institute's final report of progress made to date relative to the development of our project's health careers guidance program. The work upon which this publication is based was performed pursuant to Contract NO1-AH-24060 with the Bureau of Health Manpower, Department of Health, Education, and Welfare, May 1, 1972 through July 31, 1975. While we attempt to include each of the items suggested in the scope of work (Articles I.D. 3 and 4) evaluative data for grades seven through nine was not included due to Institute concentration of guidance services at the high school level. Institute observations of the New Haven public school's career education program indicate that it too has concentrated allied health education experiences at the high school level, with the one important exception being a pilot career education project which operates in one of New Haven's three public middle schools. The progress that has been made in this pilot program and the prospect for its expansion to other schools or grade levels is included in this report.

The Institute's guidance and career preparation model for the allied health professions has been greatly influenced by not only what the Institute proposed as needing to be done, but also by what we as a consortium of independent institutions were able to do, permitted to do, and had to do first at the initiation of our contract thirty-three months ago. In the first instance, the Institute recognized the need for much more curricular innovation at the middle school and post high school levels, it still does. In the second, third, and fourth instances, constraints in material resources, limited consortium authority, the contracted timetable for measurable results, and the urgency of perceived needs in our inner city high school constituency forced our making specific program decisions, strategies, and priorities more in keeping with the needs of that high school student population.

The Institute feels that the organization of health careers guidance and career educational services before high school is best achieved through in-school curricular strategies which embrace a broad range of career education clusters including allied health. As an extra-school agency, we consider it our responsibility to encourage and to follow the school's lead at this level, and to enrich its health careers education cluster, as much as possible, by direct Institute staff involvement, and through Institute provision of a variety of career informational materials and resources available through our resource center. At the high school level, our extra-school agency status lends itself especially well not only to the organization of, but also to the advocacy of pre-career, extra-school allied health educational experiences which we consider to be important to sound student career decision making and educational planning. Extra-school allied health experiences were organized for students in grades ten (10) through twelve (12), and represented the Institute's primary area of program concentration over the past three years.

The Institute's post high school strategies have been shaped more by the fact that minority group students are under-enrolled in state health professions training programs, and that their underrepresentation is both a consequence of educational disadvantages, and of a large number of institutionally induced restrictions to matriculation associated with the currently fragmented system of health careers education. Consequently, a significant amount of Institute time has been invested in understanding the collegiate system, in negotiating increased collegiate opportunities for our student affiliates, and in investigating strategies for educational change. A large Institute population among our member institutions in higher education is required to initiate many of the system change strategies currently under consideration. The Institute is constrained by a lack of authority to itself initiate the major changes; however, it does and will continue to sustain an active campaign of program

analysis, strategy investigation, and institutional persuasion for educational change at this level.

The Need For The Project

There were two areas of need expressed as basis for initiating this project in 1972: (1) the need to directly assist educationally disadvantaged students in preparing themselves for health careers opportunities through comprehensive guidance services, and (2) the need to address the lack of access to and mobility within the health professions system through planned educational change.

Underlying our approach to satisfying the first need, through guidance, was the recognition that the existing in-school guidance services were not of the magnitude, range, variability, and career relatedness to meet the special needs of many students wishing to pursue careers in the health professions. There was too little time from other demands to assist students in serious interest testing, values clarification, long range educational planning, and acquisition of stimulating experiences which could demonstrate the relevance of specific academic skills to health care services. The rapidity of change in health technology and the increasing number of allied health occupations posed a problem for keeping career literature current. Another important need not being satisfied was that of helping students acquire the necessary self confidence to tackle a career field in which few minorities served in skilled capacities.

On the one hand, while conceding that educational disadvantages are in part responsible for the underrepresentation of minority groups, there was the need to make more visible the desire of many disadvantaged students to share in the opportunities being denied them for "in-group" reasons as well. Access to area allied health

professions programs for minorities is especially difficult at the private colleges and the area allied health school which dominate such training, for reasons of tuition as well as selectivity. It has been the intent of this project to nurture an adequate enough student constituency to foster interest in more responsive admissions policies as well as alternative modes of training and matriculation. While a combination of careful affiliate screening, extensive guidance, and painstaking negotiation has resulted in college placements at even the most selective institutions, the level of response is not yet strong enough in the more attractive career fields. Given a decline of interest in the issue of representation and the slow pace of system change, the Institute is unique in its persistance to do something for the disadvantaged student now.

Program Components

Institute efforts to satisy those needs currently translate into the following four major project components: 1) Academic Assistance, 2) Guidance Services, 3) Career and Educational Exposure, and 4) Interinstitutional Educational Planning.

The first three of these services have been provided in an intense way, with some variation, over the entire contract period to approximately two hundred selected student affiliates. Selection in 1972 and 1973 focused on fifty high school juniors being recruited to our program. Selection in our third year was expanded to include fifty sophomores and fifty juniors. It is the program's intent to sustain sponsorship of these students into their collegiate experience. However, the character of our sponsorship will be greatly affected by student choice, geographic distance, funding, and our sphere of influence as it relates to their respective institutions. One hundred of the past graduates are matriculating in various colleges in and outside of Connecticut.

DEMOGRAPHIC DATA ON STUDENT AFFILIATES
1972-74

NHIAHC, Inc.

	n=43	n=51	n=48
	1972	1973	1974
Male	11	6	9
Female	32	45	39
Race			
Black	35	40	32
Puerto Rican	3	6	5
Other	5	5	11
School			
Hillhouse	16	21	15
Cross	12	17	19
Lee	15	11	14
H.S.C.	0	2	0
Career Interest			
Nursing	15	22	14
Medicine	5	5	6
Clinical Laboratory Services	11	2	13
Sociology/Psychology	3	5	1
Radiologic Technology	2	3	1
Physical Therapy	0	3	0
Respiration Therapy	1	2	0
Other (Vet. Med., Biology, Pharm., Med. Sec'y, Dental Asst., P.A., Biochem., Ambl. Tech. Speech Path., Psychiatric Aide, Pharmacology	5	6	9
Undecided Special Ed., Dentistry)	1	3	4
Career Exposure			
St. Raphael Hospital	13	18	15
V.A. Hospital			
Nursing	7	7	8
Rad. Tech.	1	1	0
Inhalation Therapy	2	2	0
Neurology	1	1	1
Psychology	0	1	0
Other (Adm., O.P.Clinic	3	4	5

	n=43	n=51	n=48
	1972	1973	1974
YNHH			
Nursing	6	0	2
Laboratory	2	3	2
Secretarial	0	3	0
Other (Phy. Med., Phy. Ther.) (Pathology, Inhal. Ther.)	3	8	5
Yale Medical School	5	0	0
Hill Health Center (Lab., Soc.Wk.)	0	3	8
New Haven Rehabilitation Center (Speech Path.)	0	0	1
College Matriculation			
Connecticut	20	26	17
Outside Connecticut	10	7	20
Special Training Program	1	0	1
Unemployed, not matriculated	5	4	1
Have Jobs, not in college	4	1	1
Armed Forces	1	1	2
Lost Contact	2	2	
No Information	0	10	6

The most recent component, Academic Assistance, was a two part strategy emphasizing (1) educational diagnosis and (2) prescribed instructional assistance for six weeks during the summer of 1974. Forty seven (47) sophomores benefitted from this program at that time. Southern Connecticut State College supported the Institute in providing this program by making available its learning laboratories and sharing some of its professional staff. Similarly, the New Haven Public School System shared three of its leading specialists. Fall tutorials which grew out of the summer experiences were being sustained by Institute staff. This program represented a tentative, possibly short term, Institute intervention in the domain of instruction for Institute affiliates. Technically, it extended beyond mere guidance and should ultimately be satisfied by in-school resources.

The fourth component, inter-institutional planning, (emphasizing collaborative innovations) is exciting conceptually, but proved to be very difficult to fully actualize over the short period of time we have been operating. Many of the policy issues implicit in curricular change and alternative education strategies were beyond the sphere of influence of our consortium, although future opportunities may be greater.

Methodology: Career and Educational Exposure

The purpose of this first strategy is to enlarge selected students' inventories of experiences relevant to career and educational planning. The effect of these experiences is the development of some of the cognitive skills needed in the health professions under consideration and the development of needed insights which can enable students to articulate career goals and to begin acting upon them. This is the first link in our guidance process and it emphasizes health career traineeships in area health care institutions.

With the assistance of public school personnel and community agencies, Institute staff annually recruit and select fifty juniors who (1) wish to explore particular health professions or (2) whose interests may more of less generally point to the health field. Methods of recruitment include talking to school classes, following up on recommendations made by science teachers, school counselors, community workers, and advertising through the mass media.

After selection of student "affiliates", Institute counselors acquaint students with a wide range of health professions and with major elements in the health services delivery system. This is accomplished by utilizing career information materials from the Institute Resource Center, lectures by Institute counselors, health care team demonstrations, and field trips to facilities such as Harlem Hospital Center and the Yale New Haven Medical Center.

When affiliate career preferences and interests have been preliminarily explored, the counselors negotiate with local hospitals and health center administrators for summer traineeship placements approximate to the student affiliates' career interests. After placements are negotiated, each affiliate is assigned to a health professional who serves as a (1) manager or supervisor of the student's learning experience on the training work-site, and (2) role model for the student. The counselors, in turn, negotiate with the health professional a reasonable set of instructional objectives and specific tasks needed to (1) give the student an adequate understanding of the profession he may be considering and (2) enable the student to make a meaningful contribution to the institution's on-going delivery of health services. A stipend is provided to each of the trainees from Institute resourses and participating institutions.

Summer Traineeship Program

Inventory of tasks performed by students in various departments.

(a) Nursing

1. Taking of vital signs (Temp., B.P., Pulse, Wt., etc.)
2. Charting
3. Tub baths
4. Showers
5. Feeding of patients
6. Dressing patients
7. Putting patients to bed
8. Changing of bed pans
9. Urine analysis (pH and sugar indicators)
10. Transportation of patients through wards
11. Assisting physicians with physical examination of patients
12. Making clinic visit with physicians
13. Attending nursing conferences and classes

(b) Radiologic Technology

1. Marking films
2. Positioning patients
3. Assisting with the taking of X-rays
4. Preparation of barium enemas
5. Clerical duties
6. Cleaning rooms
7. Exposure to dark room facilities
8. Exposure to the techniques of radiation therapy

(c) Laboratory Technology

1. Blood smears
2. Urine analysis
3. Coulter Counts
4. Microtoming
5. Preparation of paraffin blocks
6. Blood typing
7. Agglutination tests
8. Sensitivity test
9. Preparation of culture media and its use
10. Use of centrifuge
11. Bacterial plating
12. Culture counting
13. Techniques of incubation
14. Drug sensitivity tests for bacteria

(d) Inhalation Therapy

1. Techniques of oxygen administration
2. Use of equipment (aerosols, humidifies, respirators)
3. Giving of medications during treatment exposure
4. Washing and sterilization of instruments
5. Assemblage of respirators
6. Attend classes for respiratory care technicians
7. Attend rounds with therapist

(e) Physical Medicine

1. Maintain temperature of whirlpool baths
2. Making of beds
3. Cleaning of tanks
4. Assisting patients in exercises

(f) Bio-Medical Photography

1. Exposure to dark room facilities and its use
2. Participation in the photography of pathological sections
3. Attend photographic sessions in operating room
4. In-house photography
5. Familiarization with general photographic equipment
6. Filming
7. Cutting and splicing of films
8. Familiarization with techniques of Audiovisual Department

(g) Medicine (Students assigned to out-patient clinic rotated through the following clinics: Orthopedics, Dermatology, Gastroenterology, Genitalurinary, Metabolism, and Cardiology)

1. Blood drawing
2. Taking of vital signs
3. Reading of EKG
4. Reading of EEG
5. Assisting physician with physical examinations
6. Techniques of history taking

(h) Medical Secretary

1. Typing reports
2. General receptionist duties
3. General clerical duties

(i) Research in Anatomy

1. Paraffin preparation
2. Reading of slides
3. Techniques of electron microscopy
4. Preparation of histological sections

(j) Research in Pharmacology

1. Participation in experiments with various drugs and oxygen consumption of electron transfer particles under the influence of these drugs
2. Handling of mice
3. Tumor cell counts
4. Familiarization with routine laboratory procedures
5. Attending conferences

(k) Research in Virology

1. Plague counts
2. Preparation of media for cell growth
3. Haemagglutination tests

For the six to ten week duration of the placement, Institute counselors make periodic checks to monitor student progress and to insure that the institutions are providing instruction and assigning tasks agreed upon with the Institute.

Summer traineeship experiences which increase one's knowledge about health professions, training required, and the delivery of health services are measured by responses given on a pre test administered in late spring and a post test at the end of the program. Some experiences and behavioral changes can not be precisely quantified. However, qualitative measurements are facilitated by inferences derived from supervisor evaluations of each student's performance during the placements and student evaluations of the quality of their own traineeship experiences.

After the summer experience, the student reaffirms his career plans. He then begins an investigation of health careers training sources which can provide appropriate training by perusing materials and information available in the Resource Center. With the assistance of the program counselors he formulates plans to visit as many campuses and training sources within his means. In addition, the Institute organizes a number of group field trips to educational institutions.

Methodology: Direct Educational and Guidance Services

The Institute's direct educational and guidance services are designed to develop in students those skills and attitudes needed for rational planning in the pursuit of career goals. These services assist in the development of skills needed to master prerequisite courses and to perform well on required entrance examinations. The services are provided in such a way that a student has the burden at all times to formulate and recognize

his own concept of responsibility and to act upon needs and goals he has articulated and decided upon after his summer experience.

The Institute's direct educational and guidance strategy constitutes the second phase of intervention in orienting our affiliates toward careers in health. This strategy employs one-to-one and group counseling formats, direct tutorial assistance in the mastery of crucial prerequisite courses, as well as direct assistance in applying to schools and financial aid sources.

The nature of this phase of the Institute's intervention is educational and developmental. An operational description of this program component includes these compulsory activities:

Fall

1. Sessions in which the counselor gets reactions of students to the summer experience; gets "final" career choice; begins to construct profile of student's attitudes and feelings toward school, family, need for money, and other situations viewed by him as problems to be solved or attended to.

2. Affiliate-Parents Conference: At this conference, affiliates and their parents are given a preview of upcoming Fall and Winter Institute activities and things that must be done to get into post secondary health training programs.

3. Examination of situations listed in first set of one-to-one counseling sessions. Training in the construction of life image charts*.

*At first introduced as a game, such charts serve two functions in the one-to-one counseling sessions: (1) they serve to help the counselor relate and retain student responses and feelings in a coherent system and (2) they keep the onus of making decisions on the student since he is required to account for and refer back to his present situation and past history as he sees it. This second function is especially important since there is a tendency for counselors to impose goals. Moreover, counselees are prone to chose goals which they think the counselor approves of or wants to hear. This is avoided since the only variables being used are the ones formulated by the student.

Examine preferences and options for school after self serch for information at the Resource Center about schools, training programs, financial aid sources. Arrangement of tutoring sessions with outside agencies. SAT review by Institute staff and advisory board members in which students can improve their arithmetic and verbal skills by solving sample test problems.

4. Review decisions by student on which schools they are applying to; if there is difficulty in choosing a particular college, assisting the student in the development of decisional techniques. (e.g. weighing the positive and negative attributes of a particular school and deciding; selecting programs with varying degrees of difficulty; again, selecting safe schools to "insure" good academic performance while allowing for pursuit of other goals such as participation in extra curricular activities or to facilitate transfer to a more prestigious school)

Winter

5. Field trips to institutions in Connecticut with health careers training programs. Affiliates are required to research information from the Resource Center to use as a basis to asking questions of college administrators.

6. Arrangement of overnight visits to colleges for individual affiliates. Review of the itinerary planned.

Spring

7. Review of college acceptances. Decision making on matriculation. Review of financial aid award.

8. Psycho educational workshops. Lectures on psychodynamic situations that are encountered and methods of dealing with them. Afterwards, simulated psychodynamic situations to demonstrate and heighten the affiliate's awareness of the reactions of self and others to those situations encountered in college student life which demand utilization of decision making and problem solving skills.

College Acceptances of Institute Affiliates

State of Connecticut

	1972	1973	1974
Quinnipiac College	5	0	1
Southern Connecticut State College	2	7	3
University of New Haven	1	1	0
South Central Community College	1	3	1
Yale University	0	2	0
Albertus Magnus College	1	0	0
University of Connecticut	5	4	3
Fairfield University	1	0	0
Trinity College	1	0	0
University of Bridgeport	0	1	2
Connecticut College	0	1	0
Post Junior College	0	1	1
Central Connecticut State College	0	1	3
Eastern Connecticut State College	0	1	0
Western Connecticut State College	0	0	2
Norwalk Community College	0	1	0
St. Raphael School of Nursing	1	0	0
St. Raphael School of Radiologic Tech.	1	0	0
Eli Whitney Vocational School	0	1	1
Stone Business College	1	2	0
TOTAL	20	26	17

Colleges Acceptances of Institute Affiliates

Out of State Schools

	1972	1973	1974
North Carolina A. & T.	2	1	0
Bennett College	0	0	1
Clark College	0	1	0
Spelman College	0	0	1
Fisk University	1	0	0
Livingstone College	0	0	1
Bethune Cookman College	0	0	1
Delaware State University	0	0	1
Howard University	0	0	1
Virginia Commonwealth	0	2	0
Rensselear Polytechnic	0	1	0
Northeastern University	0	0	3
Columbia University	0	0	1
Brandeis University	0	0	1
Tufts University	0	0	1
Amherst College	0	0	1
Adelphi University	0	0	1
University of Vermont	0	0	1
Ohio Wesleyan	0	0	1
University of Rhode Island	1	0	0
Bates College	1	0	0
Clark University	1	0	0
Purdue University	1	0	0
Oberlin College	0	1	2
Elmira College	1	0	0
Idaho State University	1	0	0
Towson State College	1	0	0
Cuyahoga College	0	1	0
Massachusetts College of Pharmacy	0	0	1
Lawrence Memorial Hospital Nursing School	0	0	1
TOTAL	10	7	20

Methodology: The Academic Assistance Program

In the third year of the Institute, a Summer Academic Assistance Program provided reinforcement for fifty selected students in four areas of vital remediation. Those areas included reading comprehension, reading speed, vocabulary, and arithmetic reasoning. The program was offered to 1973-74 sophomores in the New Haven public shcools who were interested in pursuing health careers. The Institute persuaded Southern Connecticut State College to provide its facility and instructional personnel to enhance the environmental setting for learning.

In providing this program, the Institute attempted to accomplish several things:

(1) To expand its pre-collegiate educational services.
(2) To intervene at an early stage of formulation of career goals by high school students.
(3) To strengthen a student's chance of success in pursuing a health profession.
(4) To strengthen a student's performance on the scholastic aptitude test.
(5) To provide an enriching summer experience while developing more intense respect for the learning process and academic success.

The teaching team for the Summer Academic Assistance Program was composed of New Haven Public School System teachers and Southern Connecticut State College instructors. In addition, persons from the medical professions lectured on various aspects of preparation for careers in the health fields.

In addition to using standard diagnostic and instructional materials, the instructors developed learning materials drawn from the allied

health fields. Therefore, while students improved their reading and sharpened their mathematical reasoning, they also added to their information on allied health professions.

The primary objective of the Summer Academic Program was to provide a diagnostic profile of each student's academic needs which would assist us in guiding these students throughout the remaining high school years. This was accomplished in the following ways:

(1) Institute guidance follow-up on a one-to-one basis and in small groups.
(2) Language Arts and Mathematics Review sessions throughout the 1974-75 academic year.
(3) Systematic review of the scholastic aptitude test in the student's junior year.
(4) Providing career exposure in the 1975 summer traineeship program in the health professions at the end of the junior year.
(5) Provision of field trips, site visits to further expose the students toward their health career goals.
(6) Psychoeducational workshops to develop confidence, constructive self-assertion, discipline, determination and independence in young persons on the threshold of career development.

The importance of this last strategy can not be over estimated. Not only did this strategy call for the creation of an effective working relationship with member institutions, but also by redirecting existing institutional resources, the Institute further advanced its efforts in curricular innovation, inter-institutional collaboration, and provided evidence of student potential which might not have been identified.

Methodology: Inter-institutional Planning

During contract years one and two, the leadership of the Institute's Program Developer, Dr. Peter McNamara, resulted in the construction of behavioral objectives for the New Haven School's Laboratory Techniques I Course. That work was conducted by means of twenty workshops in New Haven at which the teachers of the course worked with the Institute to identify topics, to construct objectives for those topics, and to arrange the objectives in sequence. Copies of the revised curriculum accompany this report. (I.3.d.)

Program development leadership was provided to the Physical Therapy department at Quinnipiac College, Hamden, Connecticut and to the dietetic internship programs at Yale-New Haven Hospital.

Curricular development workshops with medical technologists were also held at nearly every hospital in the state that has an educational program for students of the laboratory professions. Behaviorally based instructional objectives were completed for the following:

1. Laboratory Techniques I
2. Physical Therapy: Clinical Arts - three semesters
   Clinical Practicum - one semester
3. Laboratory Professions: Clinical Education in Blood Banking, Immunology, Serology, Hematology, Clinical Chemistry, Clinical Microbiology.

(Copies of each of the above curricular were included in the Institute's Twenty-four Month Report, September 1974)

Comparative Analysis of the Evaluation of Summer Traineeship Program 1972 - 1974

		Percent		
I. Supervisors Evaluation	1972	1973	1974
A. All Categories of Performance (Quality, Productivity, Dependability, Overall Performance)			
Outstanding	51	30	19.5
Very Good	19.5	32	29.3
Good	7.3	32	45.7
Fair	21.9	6	4.9
II. Student Evaluation			
A. Supervisors			
Excellent	68.9	58	53.3
Good to Average		33	43.3
Poor	29.7	9	3.3
B. Co-workers			
Helpful	not evaluated	90	
No Comments		10	
C. Satisfaction with Summer Experience			
Very Satisfied	86	89	73.3
Fairly Satisfied	13.6	9	26.6
D. Exposure helped Determine Career Choice			
Yes	76.5	79	90
No	23.4	18	10

Evaluation of Summer Traineeships

Our tools of evaluation are simple and direct. A structured supervisor's questionnaire* is used by supervisors in all departments of the health facilities where our Student Affiliates are placed. This questionnaire is designed to elicit the following information on each student:

1. Quality of performance of tasks assigned.
2. Productivity of student.
3. Dependability of student.
4. Personal qualities of student.
5. Overall performance of student.

In addition to the structured questionnaire, a written page of supervisor recommendations is solicited for each student to be placed in his record for future college and work endeavors.

The students are also encouraged to evaluate their success and participation in the summer traineeship through a student questionnaire* which is designed to elicit the following kinds of information:

1. Rating of supervisors.
2. Rating of co-workers.
3. Satisfaction with self performance.
4. Effect on career interest.
5. Rating of NHIAHC staff.
6. Rating of overall program benefits.

Traineeship Evaluation 1972

Data gathered through supervisor and student questionaires on the 1972 Summer Traineeship Program revealed the following:

1. That none of the supervisors found Institute affiliates unacceptable in performance, productivity, or dependability.

*See Questionnaires following this section.

2. Fifty-one percent of our affiliates were judged outstanding in all categories of performance.
3. 19.5 percent of our affiliates were evaluated as very good in all categories of performance.
4. 7.3 percent were judged as good and 21.9 percent were judged as fair in all categories of performance.

Student evaluations revealed that 68.9 percent considered their supervisors as excellent, 29.7 percent considered their supervisors as having been poor. In spite of this, 86 percent of the students assessed their summer experience as having been very satisfying with 13.6 percent being fairly satisfied. 76.5 percent of the affiliates judged the traineeships as being influential in shaping their career choices.

At the end of our first year's Summer Traineeship Program, several recommendations were made and consideration was given to these recommendations in planning '73, '74, and '75 programs. These included (1) earlier recruitment of trainees by the Institute staff so that adequate time could be devoted to a descriptive explanation of the goals of this program, (2) extensive screening of the candidates, (3) plenary sessions with administrators and supervisors regarding placements, (4) matching career interest with available placements, (5) hospital orientation including tour of hospital, (6) joint conferences with trainees and supervisors, (7) explanation of duties expected to be performed by the trainee, and (8) seminars on hospital ethics and codes. By following the above recommendations, facilitation of placements and orientation was made more smoothly.

Traineeship Evaluation 1973

1. None of the supervisors found our students unacceptable in the categories already mentioned.

2. Thirty percent of all students were outstanding in all categories of performance.
3. Thirty-two percent of all students were classified as very good in all categories of performance.
4. Thirty-two percent of all students were classified as good in all categories of performance.
5. Seven percent of all students received a fair rating on performance.

At the post program evaluation conference, the supervisors at the health care institutions where our students were placed agreed on the following items:

1. All supervisors agreed to continue student placements in 1974. With two years experience, they were also able to better plan for and supervise our student affiliates.
2. Supervisors were satisfied with a newly instituted student rotation system.
3. Some of the supervisors agreed to institute small group conferences each week for students. The conferences would serve several purposes:
   a. They would be in the afternoon, thus busying students during "slow" work periods.
   b. One session could be a rap session where students could air complaints, talk about their future, and support each other.
   c. Sessions could be devoted to topics supervisors found timely, e.g. knowledge regarding Blue Cross, Medicare, etc..
   d. Students in the audiovisual department could conduct one meeting. They could select an educational film strip and discuss it. Films could cover topics such as cancer, the problems of old age, etc..

When students evaluated their summer experience using the structured questionnaire the following results were evident:

1. In rating of supervisors, fifty-eight percent rated their supervisors as excellent, thirty-three percent rated them as good to average, and nine percent rated them as poor.
2. The majority of trainees (90%) found their co-workers extremely helpful, friendly and concerned about the quality of their experience.
3. All the trainees found that integration into the assigned areas of service was easily and comfortably facilitated.
4. Eighty-nine percent of the trainees were very satisfied with themselves in degrees of performance and learning new procedures. Only nine percent were fairly satisfied with their summer experience.

In evaluating this particular career exposure in terms of positive effects on career interests, seventy-nine percent of the trainees said that the experience solidified their career choices while eighteen percent of the trainees indicated that the summer traineeship program had no effect on their choice of careers.

All trainees indicated that the overall program and its benefits were excellent and wished for it to continue.

Traineeship Evaluation 1974

When supervisors were asked to rate the overall performance of 1974 trainees, 19.5 percent rated them outstanding, 29.3 percent rated them very good, 45.7 percent were in the category of good, and 4.9 percent received a fair rating.

Secondly, when students were asked to evaluate their traineeship experience, 53.3 percent rated their supervisors as excellent, 43.3 percent rated their supervisors as good to average, and

3.3 percent rated their supervisors as poor. The majority of students (96.6 percent) developed good relationships with co-workers.

Thirdly, 73.3 percent were very satisfied with their summer exposure to health careers with 26.6 percent being fairly satisfied.

Fourthly, and most importantly, ninety percent of the trainees said that the summer exposure to health careers helped them to determine or reconfirm their career choices in health. Ten percent said that the exposure did not help them in making a career decision.

It is therefore appropriate to say that career exposure in a clinical setting does afford the student an adequate basis for deciding on a health or non-health career. As indicated in the methodology for evaluating this project, our traineeships are the only clinical or practicum training offered to our high school students. Requisitions for placements in our affiliate program are overwhelming and over subscriptions to the summer traineeship program each year indicate to us that more students could be motivated to pursue health careers if space, time, and monies were available to the Institute.

Evaluation of the Academic Assistance Program 1974

The main obljectives of the program were to provide a diagnostic overview of students' needs academically and to offer guidance early in the student's career decision-making process. The was achieved through daily instruction and regular exposure to on-site health professions; such as, clinical microscopy, nursing research, pulmonary function, neighborhood health centers, radiological technology, and physicians associate program.

In addition, films lectures, and other campus enrichment was provided.

The diagnostic aspect of the students' academic needs was assessed through pre tests at the beginning of the summer program in the areas of reading comprehension and rate, vocabulary, and mathematics. Subsequent instruction, provided in the above areas, was enhanced by visiting lecturers in particular health fields who illustrated the importance of these skills within their professions. This approach further reinforced the instructional goals in each area and facilitated a more positive atmosphere of learning.

Some of the instructional objectives in the areas covered during the program are listed below.

Reading comprehension required that students demonstrate ability to:

1. identify core parts of sentences
2. identify component parts of a paragraph
3. develop ways to maintain paragraph unity
4. analyze a paragraph as to who, what, when
5. use pronouns as replacements for nouns
6. determine inferences - reading between lines

Vocabulary development and word analysis required that students demonstrate ability to:

1. recognize the sound and the correct spelling of various vowel diagraphs
2. correctly pronounce phonetically regular polysyllabic words
3. learn the meanings of various Greek and Latin roots
4. use a dictionary to locate - antonyms, synonyms, and homonyms

Study skills required that students demonstrate ability to:

1. to develop and put to use such study methods as SQ3R* and PQRST** for studying, reading assignments and text books

*Survey, question, read, review, restate.

**Preview, question, read, state, test.
Staton, Thomas F., How To Study, 1968.

2. to develop the ability to control one's time - scheduling
3. to develop the ability to be aware of and cope with psychological factors influencing learning
4. to develop skills in remembering what is read and the ability to concentrate
5. to develop the ability to use aids to help retention
6. to practice oral and written recall
7. to develop the organization skills of putting items together in a list, outline, summary, note taking or report
8. to develop the ability to read and follow directions accurately
9. to develop review skills for examinations - how to study and take examinations (objective and essay)

Reading rate instruction required that students demonstrate the ability to:

1. quickly recognize thought units - phrases
2. group thought units in speech
3. understand that thought units answer the basic five w's; who, why, what, where, and when
4. recognize the importance of reading rate
5. understand how the SQ3R contributes to an increased reading rate

Writing skills instruction required that students demonstrate the ability to :

1. organize, outline, and summarize written material
2. recognize topic sentences - their nature and importance
3. select effective words and use figurative language
4. specify details in descriptions
5. write a character sketch
6. use a variety of sensory details in descriptions
7. achieve unity in paragraphs and descriptions

In Science-Related Mathematics, the instructional objective were:

1. to increase the students' ability to use, with at least 75 percent accuracy, the basic arithmetic skills needed in science related mathematics
2. to increase the students' ability to use, with at least 60 percent accuracy, the basic algebraic skills needed in science related mathematics
3. to engage the student in self-paced, individualized instructional progress in arithmetic, algebra, logarithm, and trigonometry which will help prepare him for the Scholastic Aptitude Test

Evaluation of Student's Progress

The instrument use in both pre and post test for vocabulary, comprehension and rate was the Nelson-Denny Reading Test. The pre test results indicated the the mean score in vocabulary was 29.8. The mean score in comprehension was 33.7 and the mean score in reading rate was 218.6.

The post test results indicated that the mean score in vocabulary was 28.8; a slight decrease of one percent. The mean score in comprehension was 39.2; an increase of 16.3 percent and the mean score in reading rate was 271.0; an increase of 23.9 percent.

The evaluation instrument used for mathematics was a special pre and post test designed by Southern Connecticut's Department of Mathematics. This in conjunction with the progress assessed in the individual workbooks served as the indicators of student needs in mathematics.

Of the forty-two students who took the pre-test, seventy-two percent showed an improvement. The results of both tests are shown in the table below:

	Range*	Median	Mean	Standard Deviation
Pre-Test	4 - 28	11	12.4	5.4
Post-Test	5 - 33	13	15.1	7.4

Thus, the average grade, as measured by the arithmetic mean, rose twenty-two percent. Among the forty-two students, there were twelve who did not demonstrate any improvement in arithmetic skills on the basis of their pre-test and post-test scores. Time allocations and the student teacher ratio were inadequate in this first program.

*Maximum possible score is 40.

However, the program, the program, through various testing and instructor assessments of the classroom progress of students, provided the Institute with a good diagnostic overview of what the students' academic needs were in all of the areas covered during the summer program.

This was the original intent of the Summer Program: to provide an adequate follow-up service to those students who participated in order to continue our intervention towards good academic achievement, decision-making, career counseling, and post secondary fulfillments.

Comparative Analysis of Institute Affiliates

In an effort to gather appropriate data for comparative analysis of our student affiliates with other students in the New Haven public school population, a student survey was designed and administered to all seniors in the New Haven public high schools. (See Appendix)

The specific objectives of this questionnaire were: 1) to determine the effect of early career guidance emphasizing career exposure, intra and extra school career counseling amoung inner city high school students, 2) to determine which factors influence decision making among urban high school students, 3) to determine which supportive services are needed and are available to urban high school students, and 4) to determine the similarity of characteristics among our affiliates and those of the population surveyed.

The student survey was designed to elicit the following categories of information:

1. demographic
2. identification of post secondary career plans
3. identification of supportive services available in schools

4. extent of need and utilization of these supportive services
5. dissemination of career information in health in high schools
6. number of students enrolled in allied health courses who continue in post secondary education
7. marketable skills of students enrolled in allied health courses
8. influence of high school personnel in formulating career plans
9. influence of outside sources, i.e. family, our Institute, community organizations, friends
10. identification of students' needs in career education and planning
11. the timetable used in career planning and notation of any changes in career throughout high school tenure.

Comparative Analysis

The number of students in the Institute's program for Years I, II, and III and the demography of that student population.

See Table of Demographic Data on Student Affiliates 1972-74 found on page 5 and 6 of this report.

The following statistics used in comparative study were derived from a survey of all seniors in the New Haven Public Schools. The survey was conducted by the School's Department of Science. We wish to acknowledge their support in making this data availabe to us.

The number of students taking high school allied health courses. Among the 526 seniors who completed the survey, 94 indicated that they had taken allied health courses offered at their high school. These couses include Laboratory Technology (1st and 2nd year), Animal Technology, X-ray Technology, and Nursing Assistance. Of the 94 who enrolled in the allied health courses, 30 students took more than one allied health course. The majority of these 30 students participated in the second year of Laboratory Technology.

According to the Office of Vocational Education for the New Haven Public Schools, the following numbers of students have been enrolled in allied health courses for the years 1972-1974.

	1972	1973	1974	1975
1. Laboratory Technology	14	15	30	not available
2. Animal Technology	15	7	38	not available
3. X-ray Technology	—	—	14	not available
4. Nursing Assistance	18	12	9	not available

We cannot submit figures indicating the number of students enrolled in allied health classes in each grade of high school.

The effect of career exposure on career planning.

In assessing the attitudes toward allied health professions of students who were exposed to allied health courses and of students who were not, we submit the following analysis:

Of the 94 students who were exposed to allied health courses in their respective high schools, 46.8 percent indicated that the allied health course content and instruction caused a change in their career plans from a non-health career to one in allied health. Sixteen percent had decided on an allied health career prior to enrolling in one of the allied health courses. Sixteen percent of the 94 students decided to pursue careers other than health after taking an allied health course. 4.2 percent had decided on careers other than health prior to enrolling in one of the allied health courses and seventeen percent of the 94 students remained undecided on a career choice after having completed an allied health course.

Of the 46.8 percent whose career choices in health were influenced by the allied health courses, all enrolled in the courses for the following reasons:

1. to help the student decide on a career in allied health
2. to enable the student to have a better chance of matriculating into a post secondary allied health program
3. to learn more about a subject that was of interest to the student

73.4 percent of all students who had completed an allied health course were satisfied with what they learned and with the instructional objectives of the course. 9.6 percent expressed disappointment in their expectations of the course they enrolled in and seventeen percent were unable to respond to this question.

It is therefore appropriate to say that the majority of students (63%) who were exposed to the allied health courses developed and/or were further motivated to develop positive attitudes toward the allied health professions and occupations.

Of those students who had chosen to pursue health careers, yet did not take allied health courses, 53.2 percent indicated that their career decision had been made prior to entry into high school. Thirty percent were influenced to make career decisions in health by science courses other than allied health courses, 10.6 percent were influenced by the counseling staff at the Institute, and 6.4 percent were influenced by personal experiences with health professionals.

17.1 percent of these students had taken advanced courses in biology, chemistry, and physics. 41.1 percent had taken four or more sciences during their tenure in high school. An additional forty-one percent had taken at least three science courses in high school. Note: the minimum requirement for high school graduation is two science courses.

There appears to be no less appreciation for the allied health professions or occupations among those who enrolled in allied health courses and those who did not. As indicated above, 53.2 percent of the students who did not take allied health courses had already decided on health careers before entry into high school and tended to enroll in traditional and advanced science courses in pursuit of their academic preparation. On the other hand, 63.8 percent of the students who took an allied health course were undecided as to a career choice before their enrollment, with 73.3 percent of these students subsequently motivated and influenced to pursue a career in the allied health professions.

The guidance counselors at the three New Haven public high schools were interviewed regarding what they considered to be the educational outcome of the allied health courses. It was agreed that the allied health courses provide good career exposure. Beyond that, the courses met different needs for different students, depending on (1) the individual student's level of career awareness, (2) how extensive his or her previous career exploration had been, and (3) whether or not he or she was ready to make a career decision. In some cases, the courses exposed students to information which aided in the choice of a career; in others, they were terminal courses.

Three of the fifteen counselors interviewed mentioned that the allied health courses reached a wider range of students than the traditional courses offered by the science department and sometimes motivated students who need to see the relevance of what they are being taught. The courses are not, however, considered to be a substitute for required science courses, so students generally do not take them unless they have some interest in the allied health professions.

Sometimes even a vague interest can be molded into a definite direction. The courses also provide an improved science/health background for students who are interested and motivated in science and are going into one of these areas.

Note: There are few students in the New Haven public high schools who have been systematically exposed to allied health careers at the middle school level. There is currently a career education program, which includes an educational cluster on health, existing in one of the New Haven public middle schools. This program has been in operation for a period of two years only.

Employability of those completing high school allied health studies. In an effort to provide some means of preparing, guiding, and encouraging high school students to pursue careers in allied health and also to provide marketable skills to high school graduates, the New Haven public schools, with a great deal of assistance from the Institute, sought to develop curricula of allied health courses in Laboratory Technology, Animal Technology, X-ray Technology, and Nursing Assistance. Initially, the purpose of these courses was to provide students with knowledge and techniques which might ensure job opportunity in allied health post high school. However, with the scarcity of job vacancies and the need for licensure and certification in allied health professions, the school's program and curricula were revised to better prepare students for entry into port secondary educational institutions of allied health. For example, a student enrolled in the Laboratory Technology course over a two year period now studies medical ethics, human physiology, hematology, urinalysis, chemistry, body functions, immunohematology, microbiology, parasitology, serology, and histological techniques. This curriculum should adequately provide a student with the basic skill to enter the job market as a Medical Laboratory Technician. However, the trend toward increasing formal education requirements and training as a prerequisite for employment and professional recognition and the trend toward the promotion of licensure, certification, and registration made it increasingly difficult for the high school graduate to utilize his high school training in allied health in the job market immediately after high school graduation.

Therefore, the skills in allied health upon the completion of twelfth grade from the New Have public school are limited to medical laboratory assistants and nursing assistants. In these areas of allied health, high school students previously exposed to allied health courses in Laboratory Technology and Nursing Assistance could enter the job market with a minimum of

on-the-job training as the only requirement. Other level of nursing and laboratory careers require post secondary academic and clinical training before being considered for employment.

This is documented in the Study of Educational Programs and Employment Opportunities in Health, prepared by the Connecticut Institute for Health Manpower Resources, Inc., which found that hospitals and other health care facilities which previously provided jobs for high school graduates were phasis out their health programs and affiliating with educational institutions. Although some facilities, and particularly hospitals, will continue to run limited on-the-job training programs, in order to fulfill specific shortage areas, the training provided often times is non reciprocal with other institutions if the employee finds it necessary to find employment elsewhere.

Perceptions of the courses by school guidance personnel

46.6 percent of the high school guidance counselors interviewed believe that the allied health courses offered in the New Haven public schools prepare students for entry level jobs in allied health; usually jobs which require on-the-job training regardless of whether or not one is "low salaried and low tenured, leading to greater skills with no increased security". One counselor mentioned that the skills gained from taking the allied health courses enabled students to obtain summer employment.

26.6 percent of the counselors believed that the courses provide stimulation for post secondary education in the health field, sometimes helping a student gain acceptance into a nursing, premedical, or allied health professions training program. Twenty percent of the counselors felt the courses were not college oriented; stating, for example, that if a student wanted to be a nurse, rather than a nurse's aide, he or she would be better off taking chemistry than the Nursing Assistance course.

Comparability of the clinical training experiences.
In analyzing and comparing the clinical training offered to high school students to that offered community college students, we find that no genuine clinical training is available to high school students enrolled in allied health courses. The only facsimilie of clinical training offered to high school students are in-class laboratory and/or clinical procedures learned as part of the particular allied health course curriculum. The only clinical exposure in health care facilities that could be classifed as practicum experience, but not articulated with the courses taken by these students, are the Summer Traineeships offered by the Institute to a select fifty students each summer. We still feel that our traineeship program has tremendous impact on the young people involved because of the actual clinical exposure afforded them before matriculation into a post secondary educational program of allied health.

According to the research done by the Connecticut Institute for Health Manpower Resources, Inc., hospitals in the past provided the training for their health personnel, both formally and informally. Gradually, educational institutions are taking over the initiative, in cooperation with clinical settings. Therefore, the majority of students enrolled in allied health programs at the community college level are exposed to clinical or practicum experiences appropriate to their majors. For example, at South Central Community College, a local institution, allied health programs in dietetic technology, radiation therapy technology, and radiologic technology are available with practicum experience in an affiliated hospital's radiation therapy and food services departments. The practicum experience amounts to 2400 hours over a two year period, a basic requirement of the American College of Radiology and the American Medical Association.

There can be no analysis of the two populations as far as practicum experience in allied health program curricula is concerned. However, it should be said that future considerations for innovative changes in the allied health courses curricula should include some practicum experience for the high school student to further stimulate and expose him to the vast knowledge gained by such an affiliation.

Anticipated job opportunities.
Existing and anticipated job opportunities in allied health available to high school graduates versus the community college graduate can be found on the following pages 37-40 of this report.

Stages in the development of career goals.
In analyzing changes in career goals of students as they progress through high school, we divided our senior population into three categories: 1) those seniors who made decisions about career goals before they entered high school and why, 2) those seniors who made decisions about career goals during their tenure in high school but before their senior year and why, and 3) those seniors who made their decisions about career goals during their senior year.

Of the 377 seniors who indicated that they had made decisions about career goals, 17.8 percent said that they made their career decision before entering high school. Ten percent made their career decision during their freshman year, 12.7 percent during their sophomore year, and 28.1 percent during their junior year in high school.

Of those students who made a career decision before high school, the majority (76.5 percent) had always wanted to pursue that

	Minimum Educational Requirement in Connecticut *	Number Employed in Connecticut 1973 **	Projections as Perceived by Employers (% increase over current employment opportunities)**
Laboratory			
Certified Laboratory Assistant	High School Diploma 12 month course with both classroom and laboratory components at a hospital	171	12.9% - 13.1% (1975) 25.8% - 30.4% (1980)
Medical Laboratory Technician	Associate Degree	436	6.9% - 8.9% (1975) 16.9% - 22.4% (1980)
Cytotechnologist	Associate Degree	89	1.8% - 3.9% (1975) 10.7% - 14.4% (1980)
Respiratory Therapy			
Pulmonary Function Technician	High School Diploma On-the-job training for hospital employees	59	16.4%-30.1% (1975) 29.2%-44.2% (1980)
Respiratory Therapy Technician	High School Diploma 6-12 month accredited training program, usually in a hospital	220	14.4%-16.6% (1975) 33% - 39.4%(1980)
Respiratory Therapist	Associate Degree	207	12.4% - 15.4%(1975) 29.7% - 38.1%(1980)

	Minimum Educational Requirement in Connecticut*	Number Employed in Connecticut 1973**	Projections as Perceived by Employers (% increase over current employment opportunities) **
Radiology			
Radiation Therapy Technologist	Associate Degree	34	34% - 57% (1980)
Radiologic Technologist	Associate Degree	875	4% - 9% (1975) 9% - 15%(1980)
Nuclear Medical Technologist	Associate Degree	68	30%-50% (1980)
Technicians			
Surgical Technician	High School Diploma 10-12 month course with both classroom and laboratory components at a hospital (A formal 2 year Associate Degree Program has recently been introduced at Manchester Community College)	344	4.9% - 6.3% (1975) 10.3% - 14.3% (1980)
Emergency Medical Technician	71 hours of academic and 10 hours of clinical training in either a hospital or community college	1,718 (trained between 1970-1973)	

	Minimum Educational Requirement in Connecticut *	Number Employed in Connecticut 1973**	Projections as Perceived by Employers (% increase over current employment opportunities)**
Electroencephalograph Technician (EEG technician)	High School Diploma on-the-job training for hospital employees	3,000 in the U.S. in 1970	
Electrocardiograph Technician (EKG technician)	High School Diploma 3-6 month on-the-job training for hospital employees	9,500 in the U.S. in 1970	
Dental			
Dental Assistant	Associate Degree	71	17% - 18% (1975) 55% - 58% (1980)
Dental Hygenist	Associate Degree	181	11% (1975) 19% (1980)
Dental Laboratory Technician	Associate Degree	607	21% - 24% (1975) 58% - 66% (1980)
Social Services			
Psychiatric Aide	High School Diploma 34 weeks of academic and clinical training for hospital employees	1,957	12.7% - 13.1% (1975) 13.2% - 15.6% (1980)

NHIAHC, Inc. Final Report Page 40	Minimum Educational Requirement in Connecticut *	Number Employed in Connecticut 1973 **	Projections as Perceived by Employers (% increase over current employment opportunities)**
Mental Health Worker	Associate Degree	71	52.6% - 82.9% (1975) 174.4% - 281.4% (1980)
Social Service Aide	Associate Degree	84	20.4% - 34.2% (1975) 25.0% - 38.9% (1980)
Rehabilitation Therapy			
Occupational Therapy Assistant	Associate Degree	68	30% (1975) 39% (1980)

*according to Health Careers in Conn., Education & Training Programs, prepared by the Connecticut Institute for Health Manpower Resources, Inc.

**according to the Study of Educational Programs and Employment Opportunities in Health, prepared by CIHMR

particular career, either from personal experiences early in life or from genuine interest manifested from parental persuasion. 19.8 percent confirmed the career choice made before entering high school by reading more about the respective career and by enrolling in school courses that would support their career decision.

In analyzing changes in career choices throughout the students' high school stay, we chose students who made their decisions about career goals in their senior year. Of this particular population, 43.3 percent made a change because of teacher influence and interest generated by a particular school course. Twenty percent changed their career choices because of family influence particularly through parental persuasion. 13.3 percent noted that financial circumstances were reasons for changing their career interests. Ten percent indicated that changes in the opportunities available in their initial career choice caused them to change career goals. 6.7 percent were influenced by summer employment and exposure to a particular career that caused a reassessment of their original plans. Finally, 6.7 percent underwent changes in attitudes due to home and school environment.

It should be noted that 27.5 percent of all students surveyed were still undecided about their career goals with graduation from high school almost at hand.

Six of the high school counselors interviewed agreed with the data which indicated that most students decided on careers during their junior year in high school. However, seven of the counselors argued that the time at which a student makes a career decision varies depending on the motivation, maturity, experiences, and environment of the individual student, and that there should be

no prescribed time for making such a decision. Two believed that the majority of students do not make a career decision until after they graduate from high school; that they merely decide whether to find employment or continue their education.

Three of the counselors felt that students should not be pressured into making a career decision before they are ready to do so. Eight counselors felt that the counselor can initiate readiness by supplying career information and encouraging the student to be more aware of his or her personal values, interests, and abilities. Six counselors believed that a career decision provides direction and motivation for a student and that students should have some goals, while maintaining the freedom to change.

Six of the counselors believe that parental influence is the most important single factor in the career decision making process of students. Two counselors mentioned that the economic situation had affected the career decisions of many students. In addition, two counselors felt that exposure to people in various professions is an important factor and that career exposure should begin before high school.

How Institute affiliates compared with other New Haven students. Our senior affiliates represent 8.4 percent of the senior class population surveyed. Of our senior affiliate population, 88.6 percent had made their career decisions with 11.4 percent still undecided. Of those students who had made career decisions, all except one had chosen careers in allied health.

The following tables show comparative data between our senior affiliates and non-affiliates in four basic areas: 1) timetable of career decision-making, 2) family income, 3) enrollment in allied health courses, and 4) post secondary plans in health careers.

TABLE I

Comparative Time Table of Career Decision-Making Between Our Senior Affiliates and Non-Affiliates.

	Our Senior Affiliates	Non-Affiliates
Before High School	27.3 %	17.8 %
Freshman Year	4.3	10.0
Sophomore Year	15.9	12.7
Junior Year	20.5	28.1
Senior Year	11.4	27.5

TABLE II

Comparison of Family Income of Senior Affiliates and Non-Affiliates for 1974-75.

	Our Senior Affiliates	Non-Affiliates
Below $5,000	9 (24.3%)	80 (21.2%)
5,000-10,000	18 (48.6%)	158 (41.9%)
10,000-15,000	7 (18.6%)	87 (23.1%)
Over 15,000	3 (8.1%)	52 (11.1%)

TABLE III

Comparison of our Student Affiliates and Non-Affiliates Who Enrolled in Allied Health Courses.

	Our Junior and Senior Affiliates	Non-Affiliates
*Enrolled in Allied Health Courses	24 (25.5%)	70 (74.6%)
Enrolled in more than one Allied Health course	17 (70.9%)	13 (18.6%)
Influenced by Allied Health course	15 (62,5%)	29 (41.4%)
Already decided on a health career prior to enrollment in Allied Health course	6 (2.5%)	9 (12.8%)

*Total number of students enrolled in allied health courses was 94.

TABLE IV

Comparison of Plans for Post Secondary Education in Allied Health Between Our Senior Affiliates and Non-Affiliates.

	Our Senior Affiliates	Non-Affiliates
College	86.4 %	10.5 %
Technical School	2.3	0.6
Armed Forces	9.3	1.7
Jobs; part-time school	2.3	2.1

Although we have no data for comparison between the non-affiliate population and our student affiliate population as we analyzed the benefits of summer traineeships in allied health careers, we have inferred from the results that such traineeships were very influential in helping them make career decisions.

STUDENT AFFILIATE EVALUATION OF SUMMER TRAINEESHIP EXPERIENCE

NAME (OPTIONAL) _____

HOSPITAL _____

COUNSELOR _____

SUPERVISOR (UNLESS YOU WERE AT ST. RAPHAEL) _____

THE ANSWERS TO YOUR QUESTIONS WILL BE KEPT CONFIDENTIAL. PLEASE ANSWER HONESTLY. WE WILL USE YOUR ANSWERS TO IMPROVE NEXT YEAR'S PROGRAM.

1. PLEASE RATE YOUR SUPERVISOR ON THE FOLLOWING. (IF YOU HAD MORE THAN ONE SUPERVISOR, RATE THE OVERALL SUPERVISION).

   I HAD: ONE SUPERVISOR _____ TWO-THREE SUPERVISORS _____
   MORE THAN THREE SUPERVISORS _____

	EXCELLENT	GOOD	AVERAGE	POOR
HELPFULNESS				
WILLINGNESS TO EXPLAIN				
CLARITY OF EXPLAINATION				
FAIRNESS IN AMOUNT OF WORK GIVEN				
EFFORT TO ENSURE THAT I HAD ENOUGH WORK TO DO				
CONCERN ABOUT THE QUALITY OF MY EXPERIENCE				
FRIENDLINESS				
EFFORT TO GIVE ME A GOOD INTRODUCTION TO THE DEPARTMENT				
EFFORT TO SUPPLY ME WITH READING MATERIALS				
EFFORT TO PROVIDE APPROPRIATE WORK OR OBSERVATIONAL EXPERIENCES FROM WHICH I COULD LEARN				

2. PLEASE RATE YOUR CO-WORKERS FOR THE SAME QUALITIES.

	EXCELLENT	GOOD	AVERAGE	POOR
HELPFULNESS				
WILLINGNESS TO EXPLAIN				
CLARITY OF EXPLAINATION				
FAIRNESS IN AMOUNT OF WORK GIVEN				
EFFORT TO ENSURE THAT I HAD ENOUGH WORK TO DO				
CONCERN ABOUT THE QUALITY OF MY EXPERIENCE				
FRIENDLINESS				
EFFORT TO GIVE ME A GOOD INTRODUCTION TO THE DEPARTMENT				
EFFORT TO SUPPLY ME WITH READING MATERIALS				
EFFORT TO PROVIDE APPROPRIATE WORK OR OBSERVATIONAL EXPERIENCES FROM WHICH I COULD LEARN				

3. DID YOU RECEIVE ANY FORMAL TRAINING? YES _____ NO _____

IF YES, PLEASE INDICATE WHICH TYPE.

_____ CLASSES (HOW OFTEN? _____)

_____ INDIVIDUAL INSTRUCTION (HOW OFTEN? _____)

_____ ASSIGNMENT OF READING MATERIAL (HOW OFTEN? _____)

PLEASE LIST TYPES OR TITLES

_____ _____

_____ _____

4. IF YOU RECEIVED FORMAL TRAINING, PLEASE INDICATE HOW GOOD YOU FELT THE TRAINING WAS:

_____ EXCELLENT _____ AVERAGE

_____ GOOD _____ POOR

5. IF YOU RECEIVED FORMAL TRAINING, PLEASE INDICATE HOW MUCH YOU FELT YOU LEARNED.

_____ VERY MUCH _____ SOME

_____ QUITE A LOT _____ NOT ENOUGH

6. IF YOU RECEIVED FORMAL TRAINING, HOW MUCH OF YOUR TRAINING DID YOUR ACTUALLY USE IN THE DEPARTMENT?

_____ VERY MUCH _____ SOME

_____ QUITE A LOT _____ LITTLE

7. HOW MUCH DID YOU LEARN BY WORKING OR OBSERVING IN THE DEPARTMENT(S) -- i.e., HOW MUCH DID YOU "PICK UP" NOT FORMAL TRAINING?

_____ VERY MUCH _____ SOME

_____ QUITE A LOT _____ NOT VERY MUCH

8. HOW MANY SKILLS DO YOU FEEL YOU LEARNED BY OBSERVING OR WORKING IN THE DEPARTMENT?

_____ A LOT _____ SOME

_____ QUITE A FEW _____ FEW

9. HOW WELL INTEGRATED INTO THE DEPARTMENT DO YOU FEEL YOU BECAME DURING THE TRAINEESHIP?

_____ I FELT VERY COMFORTABLE

_____ I FELT COMFORTABLE 75% OF THE TIME

_____ I FELT COMFORTABLE ABOUT HALF OF THE TIME

_____ I WAS UNCOMFORTABLE MOST OF THE TIME

10. TO WHAT EXTENT DO YOU FEEL YOU TOOK ADVANTAGE OF YOUR SUMMER EXPERIENCE?

_____ I AM VERY SATISFIED WITH MYSELF. I LEARNED AND OBSERVED AS MUCH AS I COULD.

_____ I AM PRETTY MUCH SATISFIED WITH MYSELF.

_____ I TOOK AVERAGE ADVANTAGE OF THE OPPORTUNITY.

_____ I AM DISSATISFIED WITH MYSELF. I DIDN'T REALLY TAKE ADVANTAGE OF THE SUMMER EXPERIENCE.

11. HOW WOULD YOU RATE YOUR OVERALL PERFORMANCE FOR THIS SUMMER

_____ I AM VERY SATISFIED WITH MYSELF.

_____ I AM FAIRLY SATISFIED.

_____ MY PERFORMANCE WAS AVERAGE.

_____ I COULD HAVE DONE BETTER.

12. DO YOU FEEL YOU HAD SUFFICIENT CONFERENCE TIME WITH YOUR SUPERVISOR?

YES _____ NO _____

IF YOU ANSWERED NO, PLEASE EXPLAIN WHY _____

_____

_____

13. DO YOU FEEL YOU HAD SUFFICIENT CONFERENCE TIME WITH YOUR COUNSELOR FROM NHIAHC?

YES _____ NO _____

IF YOU ANSWERED NO, PLEASE EXPLAIN WHY _____

_____

_____

14. WAS YOUR ORIENTATION TO YOUR HOSPITAL AND HOSPITAL PLACEMENT SUFFICIENT?

YES _____ NO _____

IF YOU ANSWERED NO, PLEASE EXPLAIN WHY _____

_____

_____

15. DID THIS SUMMER'S EXPERIENCE HELP YOUR MAKING A CAREER CHOICE?

YES _____ NO _____

16. ABOUT WHAT PERCENTAGE OF AN "AVERAGE" DAY DID YOU SPEND WORKING OR OBSERVING AS OPPOSED TO SITTING AROUND? _____%.

17. PLEASE REVIEW HOW YOU ANSWERED QUESTIONS 1-16 .

a. WOULD YOU PLEASE COMMENT ON WHAT YOU CONSIDER TO BE THE BEST PARTS OF THE SUMMER PROGRAM AND YOUR BEST EXPERIENCES.

_____

_____

_____

_____

b. WOULD YOU PLEASE COMMENT ON WHAT YOU CONSIDER TO BE THE WEAK POINTS TO THE PROGRAM AND THE EXPERIENCES YOU DID NOT LIKE OR ENJOY.

QUESTIONNAIRE FOR STUDENTS PARTICIPATING IN SUMMER TRAINEE-SHIP PROGRAM. IF YOUR ANSWER IS LONGER THAN THE SPACE PROVIDED, PLACE AN ASTERISK (*) BY THAT QUESTION AND COMPLETE IT ON THE REVERSE SIDE OF SHEET. TO INDICATE QUESTION BEING ANSWERED START OFF QUESTION BY PLACING ANSWER NUMBER IN SYMBOL ().

(1) NAME _____ (2) BIRTH DATE _____

(3) SCHOOL _____ (4) GRADE ENTERING _____

(5) SCHOOL PROGRAM ENROLLED IN _____

(6) HOSPITAL ASSIGNED TO _____

(7) NAME OF SUPERVISOR (S) _____

(8) CAREER OBJECTIVE BEFORE ENTERING PROGRAM _____

(9) HAS THERE BEEN ANY CHANGE IN YOUR CAREER OBJECTIVE OVER THE SUMMER

YES _____ NO _____

(10) IF YOUR ANSWER IS YES, INDICATE NEW CAREER OBJECTIVE _____

_____

(11) BRIEFLY STATE THE REASON FOR YOUR CHANGE IN CAREER OBJECTIVE _____

_____

_____

(12) STATE WHAT YOUR ORIGINAL WORK REQUEST WAS FOR THE SUMMER _____

_____

(13) WERE YOU ASSIGNED TO THE WORK AREA OF YOUR CHOICE YES _____ NO___

(14) IF YOUR ANSWER IS NO, STATE THE AREA YOU WERE ASSIGNED TO _____

_____

(15) DID YOU ENJOY WORKING IN THIS AREA _____

(16) HOW MANY HOURS DID YOU WORK PER WEEK _____

(17) DID YOU FIND YOUR AREA OF WORK AT THE HOSPITAL HELPFUL IN MAKING YOUR CHOICE OF A CAREER YES _____ NO _____

(18) IF YOUR ANSWER IS YES, PLEASE EXPLAIN _____

_____

_____

(19) IF YOUR ANSWER IS NO, PLEASE EXPLAIN _____

(20) WERE YOU ASSIGNED TO ONE OR MORE DEPARTMENTS OVER THE SUMMER _____

_____

(21) IF YOU WERE ASSIGNED TO ONE AREA DO YOU FEEL THAT THE AMOUNT OF TIME SPENT IN THIS AREA WAS TOO LONG, SHORT, ETC. _____

(22) IF YOU WERE ASSINGED TO ONE AREA WOULD YOU HAVE LIKE TO CHANGE TO DIFFERENT AREAS OF WORK OVER THE SUMMER YES _____ NO _____

(23) IF ANSWER IS YES, PLEASE LIST OTHER DEPARTMENTS YOU WOULD HAVE LIKE TO WORK IN _____

(24) IF YOU WERE ASSIGNED TO MORE THAN ONE DEPARTMENT, PLEASE LIST THEM

_____

(25) WERE YOU ASSIGNED SPECIFIC TASKS TO PERFORM YES _____ NO _____

(26) IF ANSWER IS YES, LIST WHAT THESE TASKS WERE _____

_____

(27) IF ANSWER IS NO, STATE WHAT ACTIVITIES YOU SPENT THE MAJOR PORTION OF YOUR TIME IN _____

_____

(28) WHERE YOU INSTRUCTED ON HOW TO PERFORM THESE TASKS YES_____ NO ___

(29) IF ANSWER IS YES, UNDER WHAT CIRCUMSTANCES WERE YOU INSTRUCTED, e.g. CLASSROOM, ON-SITE INSTRUCTION, ETC. _____

(30) DID YOUR JOB REQUIRE YOU TO WORK WITH ANY EQUIPMENT YES ____ NO ___

(31) IF ANSWER IS YES, STATE WHAT THIS EQUIPMENT WAS _____

_____

(32) DID YOUR SCHOOL EXPERIENCE PREPARE YOU FOR ANY OF YOUR ASSIGNED TASKS YES _____ NO _____

(33) IF ANSWER IS YES, EXPLAIN _____

_____

_____

(34) WERE YOU ASSIGNED TO ONE OR MORE SUPERVISORS _____

(35) DID YOU MEET ON A REGULAR BASES WITH YOUR SUPERVISOR YES ____ NO __

(36) IF ANSWER IS YES,EXPLAIN _____

_____

(37) IF ANSWER IS NO, EXPLAIN _____

_____

(38) WAS YOUR SUPERVISOR HELPFUL OR UNHELPFUL TO YOU OVER THE SUMMER ____

_____

(39) DID YOU PARTICIPATE IN ANY CLASSROOM ACTIVITIES, SUCH AS FILMS, SPEAKERS, ETC., OVER THE SUMMER YES _____ NO _____

(40) IF ANSWER IS YES,PLEASE EXPLAIN WHAT THEY WERE ABOUT _____

_____

_____

(41) WERE YOU ASSIGNED ANY READING MATERIAL OVER THE SUMMER YES ____ NO ___

(42) IF ANSWER IS YES, STATE SUBJECT THE MATERIAL DEALTH WITH _____

_____

_____

(43) DID YOU HAVE ANY PROBLEMS WHILE WORKING THIS SUMMER YES_____ NO ___

(44) IF ANSWER IS YES, EXPLAIN _____

_____

_____

(45) IF YOU HAD PROBLEMS OVER THE SUMMER HOW DID YOU HANDLE THEM (SUPERVISOR, INSTITUTE, ETC.) _____

_____

_____

(46) DO YOU FEEL THAT THE INSTITUTE COULD HAVE BEEN MORE HELPFUL TO YOU OVER THE SUMMER YES _____ NO _____

(47) IF ANSWER IS YES, EXPLAIN _____

_____

_____

(48) WOULD YOU LIKE TO SEE PLANNED ACTIVITIES IN NEXT SUMMER'S PROGRAM (SPEAKERS, FIELD TRIPS, ETC.) YES _____ NO _____

(49) IF ANSWER IS YES, STATE AREAS YOU WOULD LIKE EXPOSURE TO _____

_____

_____

(50) IF ANSWER IS NO, EXPLAIN _____

_____

_____

(51) WHAT IMPROVEMENT WOULD YOU LIKE TO SEE IN THE PROGRAM NEXT YEAR (IF ANY) _____

_____

_____

(52) WHAT SERVICE CAN THE INSTITUE PROVIDE TO YOU IN YOUR COMING SCHOOL YEAR _____

_____

(53) WHAT ARE YOUR PLANS FOR THE COMING SCHOOL YEAR _____

_____

_____

(54) DO YOU INTEND TO APPLY TO COLLEGE YES _____ NO _____

(55) IF ANSWER IS YES, WHICH ONE(S) DO YOU INTEND TO APPLY TO _____

_____

_____

(56) DO YOU INTEND TO APPLY TO A NURSING PROGRAM YES _____ NO _____

(57) IF ANSWER IS YE[illegible]HICH ONE(S) DO YOU PLAN TO APPLY TO _____

_____

_____

(58) WOULD YOU LIKE THE INSTITUTE TO BE OF ASSISTANCE TO YOU IN YOUR PURSUITS OF HIGHER EDUCATION YES _____ NO _____

(59) IF ANSWER IS YES, STATE WHAT TYPE OF ASSISTANCE YOU WOULD LIKE

_____

_____

(60) IF YOUR ANSWER TO QUESTIONS (54) AND (56) ARE NO WHAT ARE YOUR PLANS AFTER GRADUATION _____

_____

_____

(61) IF THERE IS ANY ADDITIONAL INFORMATION THAT YOU FEEL WE SHOULD KNOWN CONCERNING YOUR SUMMER EXPERIENCE USE THE REMAINING SPACE:

NEW HAVEN INSTITUTE OF ALLIED HEALTH CAREERS

STUDENT REVIEW FORM

Box 7426
New Haven, Ct. 06519

Student name _____

Department _____

Supervisor name _____

Days absent _____

Days tardy _____

PERFORMANCE FACTORS	1	2	3	4	5	6	Please explain all ratings
Quality							
Accuracy							
Economy of materials							
Neatness & thoroughness							
Knowledge of tasks on checklist							
Perserverance							
Manner with Patients							
Productivity							
Productive volume							
Economy of time in performance of task							
Ability to organize							
Dependability							
Judgement							
Acceptance of responsibility							
Punctuality							
Attendence							
Ability to follow directions							

PERFORMANCE FACTORS	1	2	3	4	5	6	Please explain all ratings
<u>Personal Qualities</u> Neatness of appearance Attitude Acceptance of advice Cooperation Initiative							
OVER-ALL PERFORMANCE							

Instructions for Student Performance Rating

1. An evaluation of the performance of the student should be made by his or her immediate supervisor at the end of the student's placement in the department. (Supervisors having a student for less than a week have the option for not evaluating the student if the supervisor feels that he or she did not get to know the student adequately to evaluate him in the period.

2. The student's performance on each of the duties should be rated by placing an "X" in the appropriate column, according to the following guidelines:

   Column 1 - Outstanding: Highly outstanding performance. Work is characterized by unusual accomplishments, contributions and complete reliability.

   Column 2 - Very Good - Better than average performance. Work is dependable and exceeds normal job requirements.

   Column 3 - Good - Normal, dependable performance. Work meets normal job requirements.

   Column 4 - Fair - Below average, marginal performance. Work does not consistently meet all job requirements. Improvement is needed.

   Column 5 - Unacceptable - Poor performance. Work is far below job requirements. Immediate, extensive improvement is required or discharge is imminent.

   Column 6 - Do not know the student well enough to evaluate.

3. When all factors have been rated an over-all rating should be made indicating the value of the student's performance to the program.

4. Where the student is rated above or below "Good" a sound and fair explanation for the rating must be recorded. Comments may also be recorded for "Good" ratings when desired.

NEW HAVEN INSTITUTE OF ALLIED HEALTH CAREERS

ACADEMIC ASSISTANCE PROGRAM

STUDENT QUESTIONAIRE

This is an opportunity for you to evaluate this program, its content and instructors. Please be fair and constructive in your comments and/or criticisms.

1. Were the expectations (goals) you had set for yourself at the beginning of the program adequately satisfied by the end of the program?

a. All of them were satisfied_____

b. Most of them were satisfied_____

c. Some of them were satisfied_____

d. None of them were satisfied_____

e. Other comments_____

2. Was the period of six weeks long enough to achieve what you had hoped to achieve?

a. Too long_____

b. Long enough_____

c. Not long enough_____

3. Do you feel the instructors provided the necessary skills to enable you to do your work better in the following areas:

	Yes	No	Comments
a. Study Skills.....			
b. Writing Skills.....			
c. Reading Comprehension.....			
d. Reading Rate.....			
e. Vocabulary.....			
f. Mathematics.....			

4. How would you rate the instruction in the following areas?

	Excellent	Good	Fair	Poor	Other
a. Study Skills.....					
b. Writing Skills.....					
c. Reading Comprehension....					
d. Reading Rate.....					
e. Vocabulary.....					
f. Mathematics.....					

5. Do you feel there was enough time devoted to the above areas to make a difference in your academic achievements for the coming year?

Yes_____ Comments_____

No_____

6. Were the lectures given helpful in further developing your career interests?

Yes_____

No_____

Comments_____

7. Do you want further academic assistance during the coming school year?

Yes_____

No_____

Comments_____

If yes, in what areas do you want to concentrate?

1._____ 2._____ 3._____

8. How would you prefer this assistance to be made available?

a. On a one-to-one basis_____

b. In a small group_____

c. Other_____

9. How valuable did you find the site visits, such as to the various departments of the hospitals, etc.

a. Very valuable_____

b. It was alright_____

c. Not very valuable___

d. A waste of time_____

e. Other comments_____

10. How helpful did you find the Allied Health Careers Staff, that is, Mr. Turner, Mrs. Coleman, Mrs. Boyd, in dealing with whatever problems you had?

a. Very helpful_____

b. Gave adequate help___

c. Not very helpful_____

d. Other comments_____

11. Would you like student representation in the planning sessions for the next Academic Assistance Program?

Yes_____

No_____

12. How would you rate the overall program?

a. Excellent_____ Other Comments_____

b. Good_____ _____

c. Fair_____ _____

d. A waste of time_____

12. Please write in your own words any comments, criticisms, or recommendations that you may wish to express about the Academic Assistance Program and its impact on you as a participant.

THANK YOU AND HAPPY REMAINING SUMMER!

NEW HAVEN INSTITUTE OF ALLIED HEALTH CAREERS, INC.

Student Progress Report

Student Annie Newton

Department Clinical Microscopy Hospital Yale New Haven Hospital

Dates: From _____ To _____

	Very Good	Good	Fair	Poor
Perserverance	✓			
Initiative	✓			
Ability to follow Directions	✓			
Organizing Ability	✓			
Willingness to accept Responsibility	✓			
Judgment	✓			
Accuracy	✓			
Speed	✓			
Spirit of Cooperation	✓			
Manner with Patients	✓			
Personal Appearance	✓			

Remarks and Impressions: Very interested and conscientious student.

Stephen N. Ingalls
Signature of Instructor

7-72

Master

3 High Schools Combined

This survey is being done under the auspices of the Department of Science, New Haven Public Schools, in support of the New Haven Institute of Allied Health Careers, Inc.

April 4, 1975

Total - 526

SURVEY QUESTIONNAIRE

You are not asked to give your name.

Are you a student member of the Institute of Allied Health? Yes 43 No ____

1. Name of your high school: _____

2. Your age: ____ years

3. Sex: Male 280 Female 248

4. Ethnic background:

   Black 307

   Spanish surname 36

   White 172

   Other, please name 10

5. Number of children in your family including yourself: _____

6. Family income: (Check one only)

   Below $5,000 89

   $5,000 - $10,000 176

   $10,000 - $15,000 94

   Over $15,000 56

   No Answer 113

7. Class rank: ____

8. S.A.T. scores: Verbal ____ Math ____

9. How long have you been going to New Haven public schools? ____ years

10. What extra-curricular activities have you taken part in? _____

11. If you have not taken part in any extra-curricular activities, why not?

12. What jobs have you had while in high school (summers included)?

13. What are your plans for next year? (Check one only)

a. College 257

b. A job 123

c. Armed forces 37

d. Technical school 41

e. Other, please name _____

No Answer 13

14. Does your family expect you to go to college?

Yes 309 No 125 I don't know 86

If you are going to college, answer the next two questions.

15. What made you apply to a particular college? (Write VI [Very Important], I [Important], or SI [Slightly Important] next to all that apply)

a. Best school suited to my career goal 164

b. Best financial aid available 104

c. Cheap tuition 63

d. Recommendation of my counselor 57

e. Recommendation of a teacher 44

f. My parents want me to go there 30

g. I want to stay close to home 60

h. My friends are going, or I have friends who already go there 20

i. Influence of college recruiter who came to my school 38

j. I visited the school and liked it 91

k. It will help me get a better job 150

l. My grades are good enough to get in 92

m. Because of its racial or religious affiliation 15

n. Athletic financial aid 26

16. List the three schools to which you applied that you would most like to attend.

1. _____

2. _____

3. _____

17. If you decided not to go to college, why not? (Pick the 3 most important reasons and write the number 1 next to the most important, 2 next to the second most important, and 3 next to the least important)

a. Did not want to take tests (S.A.T. or placement) 41
b. Tired of school; I want to take some time off 90
c. Too expensive; I can't afford it 105
d. Never got around to finishing the applications 30
e. I want to get married instead 43
f. My parents don't think I should go to college 16
g. No one at school encouraged me to go 25
h. My grades are not good enough 79
i. Job is available after graduation 88
j. I'm not interested in college 90
k. College is not best suited to my career goals (please explain) 23

18. Have you taken any of the allied health courses offered at your high school? Yes 94 No____

If no, do not answer questions 19-21.

19. If yes, check all those that you have taken.

X-ray 12 Nurses Aide 12
Lab. Tech. I 56 Animal Tech. 16
Lab. Tech.II 28

20. What did you expect to get out of taking these allied health courses? (Rank from 1-6, in order of their importance to you, all that apply with 1 being the most important and 6 being the least important)

a. Information that would help me decide on a health career 39
b. Substitute for biology or other science requirement ____
c. Better chance of getting into a college of allied health ____
d. Learn more about a subject that interests me ____
e. Better chance of getting a job after high school graduation ____
f. Other, please explain ____

21. Did the allied health courses meet your expectations?

Yes 69 No 9 No Answer 16

Explain your answer _____

22. What other science courses have you taken in high school?

Biology _____	General Physics _____
Advanced Biology _____	Physics _____
Botany _____	Advanced Physics _____
General(Descriptive) Chemistry _____	Human Physiology _____
Chemistry _____	Physical Science _____
Advanced Chemistry _____	Independent Study _____ (please name)

23. What courses are you taking this year? _____

_____

_____

24. What career have you decided to pursue? Yes - 376 No - 115 No Ans. 36

If undecided, what general area are you interested in? _____

_____

If you cannot answer question 24, go on to question 29.

25. Has there been a change in your career interest since you entered high school? Yes_____ No_____

If yes, what caused you to change your career interest? (List the reasons)

1. _____
2. _____
3. _____

26. When did you know what career you wanted to pursue? (Check one only)

Freshman year 42

Sophomore year 53

Junior year 115

Senior year 105

Before I entered high school 76

No Answer 31

27. How did you decide on this particular career or career area? (Check all that apply)

a. I have always dreamed of pursuing this career 136

b. By reading all I could about it 111

c. Counselor's suggestion 49

d. Parent's suggestion 58

e. Teacher's suggestion 60

f. Friend's suggestion 63

g. Influenced by how much I enjoyed a school course 183

h. Influenced by Institute of Allied Health Careers personnel 31

i. Influenced by someone at a community organization (Please name) 17

_____

j. Other, please name 31 _____

28. What experiences did the school provide that made you want to pursue a particular career? Please list.

1. _____

2. _____

3. _____

29. Do you know of any sources of career information available in your school?

Yes_____

If yes, name these sources.

1. _____ 3. _____

2. _____ 4. _____

30. Do you know of any sources of career information outside your school?

Yes_____ No_____

If yes, name these sources.

1. _____ 3. _____

2. _____ 4. _____

31. What sources of career information have you made use of in deciding what you would or would not choose as a career?

1. _____ 3. _____

2. _____ 4. _____

32. What changes did you make in order to better carry out your career goals? (Check all that apply)

a. Insisted on school courses not recommended to you 69

b. Improved your school work 192

c. Got information about requirements to get into the career you want 237

d. Other, please name _____ 25

_____

33. What person in the school has been most helpful in getting your career plans together? (Check one only)

a. Principal 8

b. Ass't. principal 5

c. Teacher 167 37.4%

d. Teacher aide 5

e. Social worker 6

f. Counselor 198 44.4%

g. Coach 13

h. Department chrm. 13

i. Other, please name 31

446

34. How often do you see your counselor? (Check one only)

a. Once a week 142

b. Once a month 85

c. Less than once a month 87

d. Only when he or she asks to see me 132

35. Did your counselor ever speak with or write to your parents about your future plans? Yes 92 No 292 Don't know 86

36. What role did your counselor play in getting your plans together for next year? (Check all that apply)

a.	Got me career information	142 ✓
b.	Sent me to sources that helped me with career planning	63
c.	Helped me pick courses that were essential to my career goals	126 ✓
d.	Helped me fill out college applications	147 ✓
e.	Told me about scholarships, loans, and other financial aid	188 ✓
f.	Suggested schools to which I should apply	164 ✓
g.	Took me on field trips to colleges	31
h.	Told me when college recruiters I might want to hear were coming to school	124
i.	Provided no assistance	78
j.	Other, please explain	9

37. What role did your parents play in getting your plans together for next year? (Check one only)

a.	My parents suggested a plan which I followed	37
b.	My parents know my plans but left it up to me entirely	250
c.	We decided together	85
d.	My parents suggested a plan which I did not follow	14
e.	My parents don't know my plans	45
f.	Other, please explain	17

38. In what ways have your teachers been helpful to you? (Check all that apply)

a.	Encouraged me to get better grades	272
b.	Helped me make career decisions	105
c.	Extra tutoring	49
d.	Helped me make college plans	73
e.	Other, please explain	38
	No Assistance	7

39. Have you received any help from outside organizations such as Urban League, Ulysses S. Grant, Upward Bound, Yale Tutorial Services, CONNPEP, New Haven Institute of Allied Health, or other community organizations? Yes_____ No_____

If yes, from what organization(s) did you receive assistance?

a. Urban League 60
b. Ulysses S. Grant 17
c. Upward Bound 13
d. Yale Tutorial Services 10
e. CONNPEP 5
f. New Haven Institute of Allied Health 28
g. Other, please name Comtec 8
Other 4

40. What kinds of assistance did you receive? (Write the name of the organization(s) next to all that apply)

a. Schoolwork _____
b. Counseling _____
c. Field Trips _____
d. Jobs _____
e. Fee Waivers _____
f. Financial Aid Information _____
g. Other, please name _____

41. Did you find this assistance to be of any benefit to you? (Write the name of the organization(s) next to the one that applies)

a. Very helpful _____
b. Satisfactory _____
c. A waste of time _____
d. Other comments you wish to make _____

_____

_____

42. Where do you go in your school to get special help with your schoolwork? (Please list)

1. Teachers
2. Counselors
3. Library

43. How often do you receive special help in school? (Check one only)

a.	More than once a week	23
b.	Once a week	42
c.	Once a marking period	64
d.	Only at final exam time	48
e.	Other, please write in	71

44. What makes you try to do your very best in school?

a.	Wanting to get into a good college	181
b.	Personal satisfaction in succeeding	304
c.	Expectations of parents	159
d.	Expectations of friends	50
e.	Expectations of teachers	83
f.	Expectations of counselor	70
g.	Other, please write in	30

45. Now that you are about to graduate, what kinds of services do you wish your school would provide to help students to do better in school?

1. _____
2. _____
3. _____

46. What kinds of services do you wish your community would provide to students to help them to do better in school?

1. _____
2. _____
3. _____

New Haven Institute of Allied Health Careers

Final Report

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